

a lower layer of said medium access control sub-layer,
wherein said medium access control sub-layer is configured to perform self-basic functions or functions associated with said upper layers or lower layer and wherein said medium access control sub-layer includes a common control channel group and a dedicated control channel group.

2. (Amended Three Times) The communication system as set forth in claim 1,
wherein said self-basic functions include:

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a random access control information transfer function,
a control information transfer function,
a user information transfer function,
framing/deframing functions,
segmentation/reassembly functions,
functions of dividing a frame of a specific one of said upper layers into channels of said lower layer and vice versa,
a cyclic redundancy check function,
a function of detecting an error of a medium access control sub-layer frame, and
a rate adaptation function of adjusting a number of bits suitably for a radio frame.

3. (Amended Three Times) The communication system as set forth in claim 1, wherein said associated functions include:

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- a synchronization information control function;
 - a system information control function,
 - lower channel activation/deactivation functions,
 - quality monitoring and reporting functions of, for maintenance of traffic channel quality, supporting power control, triggering a handover or reporting a channel condition upon traffic channel allocation, and
 - a multi-bearer sequencing function of sequencing a multi-code.
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Please add new claims 35-49 as follows:

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35. (New) The communications system as set forth in claim 1, wherein said self-basic functions include a random access control information transfer function, functions of dividing a frame of a specific one of said upper layers into channels of said lower layer and vice versa, a rate adaptation function of adjusting a number of bits suitably for a radio frame, and a ciphering function.

36. (New) The communication system as set forth in claim 1, wherein said associated functions include a system information control function and a channel condition reporting function .

37. (New) A communication system which has a plurality of mobile terminals and a base station, each of said mobile terminals and/or base station comprising:

a medium access control sub-layer;

upper layers of said medium access control sub-layer; and

a physical layer of said medium access control sub-layer,

wherein said medium access control sub-layer includes a common control channel group for controlling channels for transmitting control information between the medium access control sub-layer and the physical layer and a dedicated control channel group for controlling channels for transmitting user information between the medium access control sub-layer and the physical layer.

38. (New) The communications system as set forth in claim 37, wherein the common control channel group includes a broadcasting control channel, a paging channel, a synchronization channel, a forward access channel, and a random access channel.

39. (New) The communications system as set forth in claim 38, wherein the paging channel, random access channel, and the forward access channel are included in a common control channel.

40. (New) The communications system as set forth in claim 39, wherein the common control channel sets a stand-alone dedicated control channel between at least one of the mobile terminals and the base station.

41. (New) The communications system as set forth in claim 40, wherein the dedicated control channel group includes the stand-alone dedicated control channel which is set by the common control channel.

42. (New) The communications system as set forth in claim 38, wherein the forward access channel and the random access channel are used in pair.

43. (New) The communications system as set forth in claim 37, wherein the dedicated control channel group includes a stand-alone dedicated control channel, an associated control channel, and a traffic channel.

44. (New) A communication system which has a plurality of mobile terminals and a base station, each of said mobile terminals and/or base station comprising:

a medium access control sub-layer;

upper layers of said medium access control sub-layer; and

a physical layer of said medium access control sub-layer,

wherein said medium access control sub-layer is configured to perform self-basic functions or functions associated with said upper layers or said physical layer, and wherein said medium access control sub-layer includes:

a synchronization control entity for controlling a synchronization channel for broadcasting synchronization information,

a paging control entity for controlling a paging channel for paging at least one of said mobile terminals,

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a broadcast control entity for controlling a broadcasting channel for broadcasting system control information;

a common control entity for controlling a random access channel and a forward access channel for transmitting access control information between at least one of said mobile terminals and said base station, and

a traffic control entity for controlling a traffic channel for transmitting user information between at least one of said mobile terminals and said base station by a point-to-point channel.

45. (New) The communications system of claim 44, wherein the self-basic functions include:

a random access control information transfer function,

a control information transfer function,

a user information transfer function,

framing/deframing functions,
segmentation/reassembly functions,
functions of dividing a frame of a specific one of said upper layers into channels
of said physical layer and vice versa,
a cyclic redundancy function,
a function of detecting an error of a medium access control sub-layer frame, and
a rate adaptation function of adjusting a number of bits suitably for a radio frame.

46. (New) The communications system as set forth in claim 44, wherein said
associated functions include:

a synchronization information control function,
a system information control function,
lower channel activation/deactivation function,
quality monitoring and reporting functions of, for maintenance of traffic channel
quality, supporting power control, triggering a handover or reporting a channel condition upon
traffic channel allocation, and
a multi-bearer sequencing function of sequencing a multi-code.

47. (New) A communication system which has a plurality of mobile terminals and
a base station, each of said mobile terminals and/or base station comprising:

a medium access control sub-layer;

upper layers of said medium access control sub-layer; and
a lower layer of said medium access control sub-layer,
wherein said medium access control sub-layer is configured to perform self basic functions or functions associated with said upper layers or lower layer and wherein said medium access control sub-layer includes:

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a broadcast control entity for controlling a broadcasting channel for broadcasting system control information,

a common control entity for controlling a radio access channel and a forward access channel and a paging channel for transmitting control information between at least one of said mobile terminals and said base station; and

a traffic control entity for controlling a traffic channel for transmitting user information between at least one of said mobile terminals and said base station by a point-to-point channel.

48. (New) The communications system of claim 47, wherein the self-basic functions include:

a random access control information transfer function,
a control information transfer function,
a user information transfer function,
framing/deframing functions,
segmentation/reassembly functions,

functions of dividing a frame of a specific one of said upper layers into channels of said physical layer and vice versa,

a cyclic redundancy function,

a function of detecting an error of a medium access control sub-layer frame, and

a rate adaptation function of adjusting a number of bits suitably for a radio frame.

49. (New) The communications system as set forth in claim 47, wherein said associated functions include:

a synchronization information control function,

a system information control function,

lower channel activation/deactivation function,

quality monitoring and reporting functions of, for maintenance of traffic channel quality, supporting power control, triggering a handover or reporting a channel condition upon traffic channel allocation, and

a multi-bearer sequencing function of sequencing a multi-code.